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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,890	07/12/2006	Jane E. Tateson	36-1994	7657
23117	7590	04/13/2009	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			KUNDU, SUJOY K	
			ART UNIT	PAPER NUMBER
			2863	
			MAIL DATE	DELIVERY MODE
			04/13/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/585,890	TATESON, JANE E.	
	<b>Examiner</b>	<b>Art Unit</b>	
	SUJOY K. KUNDU	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 January 2009.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The following references are listed in the specification and must be submitted on a PTO-892 form or deleted from the specification:

1. WO2004/001999 as seen on page 2 of the specification
2. WO2004/003510 as seen on page 2 of the specification
3. WB Heinzelman, AP Chandrakasan and H Balakrishnan, (Energy-Efficient

Routing Protocols for Wireless Microsensor Networks, Proceedings of the 33<sup>rd</sup> International Conference on System Sciences (HICSS '00), January 2000 as seen on page 4 of the specification

4. A Cerpa, J Elson, D Estrin, L Girod, M Hamilton, and J Zhao, "Habitat Monitoring: Application Driver for Wireless Communications Technology," ACM SIGCOMM Workshop on Data Communications in Latin American and the Caribbean, Costa, Rica, April 2001 as seen on pages 4-5 of the specification
5. GB0321096.0 as seen on page 11 of the specification

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-10, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wan (US 2002/0147024 A1).

With regards to Claim 1, 10, Wan teaches a sensor device having means for periodically generating a measured value of a property (Figure 5, 510, Page 4, Paragraph 53), comprising means for determining the rate of change in the measured property (Figure 5, 520, Page 4, Paragraph 54) and means for determining the values of the property being measured by similar devices (Page 4, Paragraph 55, “speed or rate of change of the received signal strength”), and means for adjusting the periodicity of measurement according to these values (Figure 5, 530, Page 7, Paragraph 86).

With regards to Claim 4, 13, Wan teaches a sensor device wherein the device has means for determining the values being measured by neighbouring devices (Figure 5, 510, Page 4, Paragraph 53) and means for controlling the device to reduce the frequency at which measurements are taken if neighbouring devices are obtaining the same values for the measurements (Page 6, Paragraph 71).

With regards to Claim 5, Wan teaches a sensor device, comprising a transmitter to broadcast the measurements being taken by the device and a receiver to receive such broadcasts from similar devices (Figure 3, 120, "transceiver," Page 3, Paragraph 42).

With regards to Claim 6, 14, Wan teaches a sensor comprising means for exchanging data with neighbouring devices for the purpose of relaying it to a data collection point (Figure 3, 130, "storage medium"), the data generated by the device or received from others being stored in a buffer until it can be transmitted (Page 3, Paragraph 42).

With regards to Claim 7, 15, Wan teaches a sensor device, the means for adjusting the periodicity of measurement being responsive to the level of such traffic ("travel") being handled by the device (Pages 5-6, Paragraph 71).

With regards to Claim 8, 16, Wan teaches a sensor device, having means for determining the level of data traffic being carried by one or more neighbouring devices (Figure 5, 510), means for comparing the traffic levels carried by the neighbouring devices with the traffic it is itself carrying (Pages 5-6, Paragraph 71), and means for transmitting control data to other devices if it is carrying less traffic ("slow traffic") than other devices (Page 5-6, Paragraph 71), and means for receiving such control data from devices identified as carrying less traffic than it is, the control data having the effect of adjusting the times at which the measurements are taken by the device receiving the control data (Pages 6, Paragraph 71).

With regards to Claim 9, 17, Wan teaches a sensor device, wherein the control data generated by the transmitting device controls the receiving device to reduce its data measurement rate ("...30 seconds to every 240 seconds..," Page 6, Paragraph 71).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 11-12, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan (US 2002/0147024 A1).

With regards to Claim 2, 11, Wan teaches a sensor device, having means for determining the rate of change of the property being measured (Figure 5, 520, Page 4, Paragraph 54).

Wan teaches the limitations of reducing the frequency at which measurements for the purpose of conserving battery power (Page 6, Paragraph 71).

However, Wan is silent about increasing the frequency with which measurements are taken when the property being measured is changing. However, as stated above, Wan does teach adjusting the frequency to decrease the time the measurements are obtained for the purpose of conserving battery power (Page 6, Paragraph 71). As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the frequency to obtain additional measurements so as to provide more accurate data.

With regards to Claim 3, 12, Wan fails to teach the limitation of a sensor device comprising means for calculating the standard deviation of a predetermined number of preceding readings.

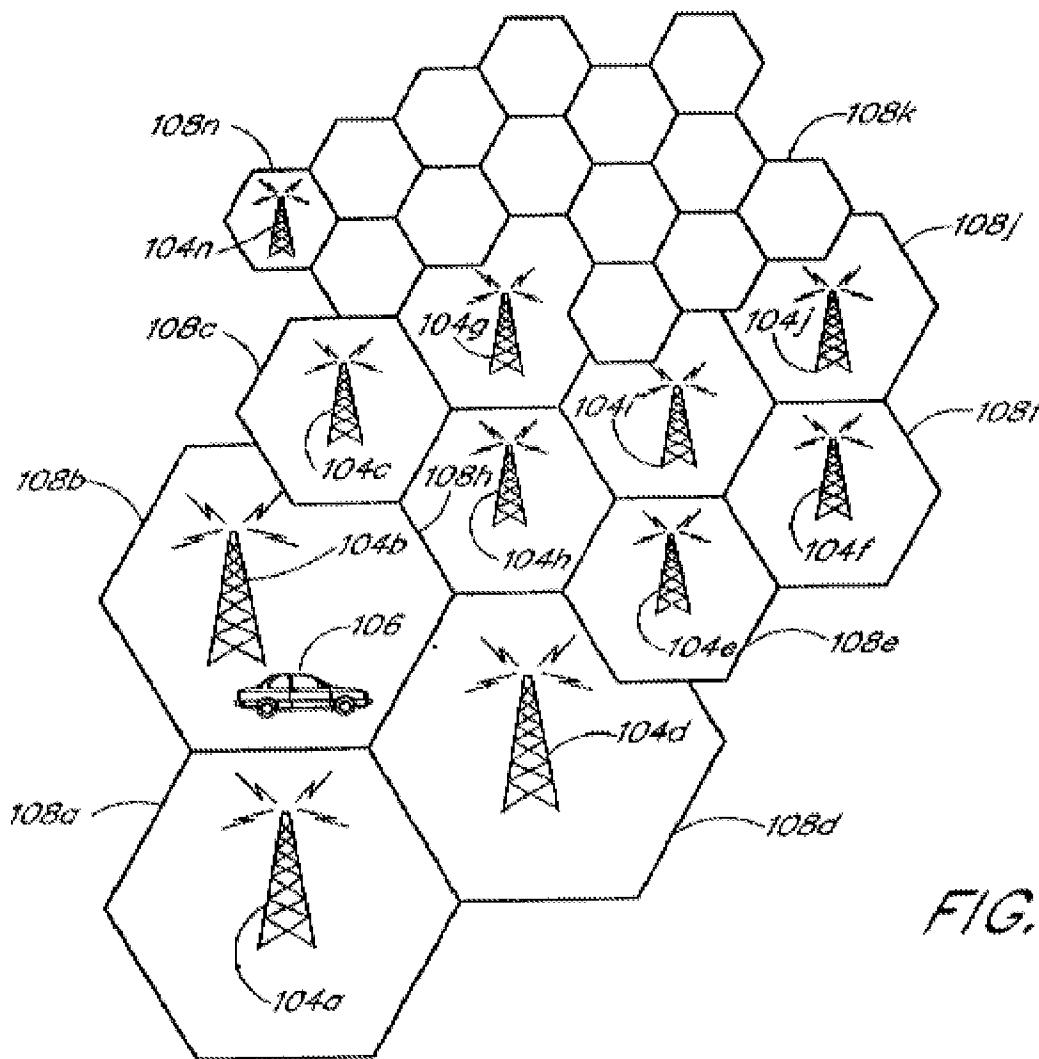
Although Wan fails to teach this limitation, the use of such a well known statistical analysis would have been obvious to one of ordinary skill. Specifically, absent a showing of criticality, the use of any well known statistically analysis, such as standard deviation, to process data into a useful form would have been obvious to an artisan to enable a user to make usefully meaning out of a large amount of data to determine the values of the property being measured.

With regards to Claim 18, Wan teaches the limitations of reducing the frequency at which measurements for the purpose of conserving battery power (Page 6, Paragraph 71).

However, Wan is silent about staggering the times at which they take measurements. However as stated above, Wan does teach adjusting the frequency to decrease the time the measurements are obtained for the purpose of conserving battery power (Page 6, Paragraph 71). As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the frequency to obtain additional measurements and then reduce the frequency at which measurements for the purpose of conserving battery power in a staggering motion to obtain a range of data for statistical analysis.

Applicant's arguments filed January 16, 2009 have been fully considered but they are not persuasive. Applicant argues that Wan does not teach determining the values of the property being measured by similar devices. Examiner respectfully disagrees with the applicant.

In the Non-Final Action dated October 16, 2008, the examiner specifically refers to Page 4, Paragraph 55 (Page 4 of Non-Final), Wan uses the language, “the mobile unit 106 may determine the speed or the rate of change of the received signal strength...” The applicant does not specify what values of the property are in the claim language. The examiner has interpreted the speed or the rate of change of the received signal strength as a property. Additionally, Figure 2 shows multiple base stations in neighboring cells, which the signal strength is measured, therefore the multiple base stations are interpreted as similar devices.



Applicant further argues that Wan does not teach adjusting the scanning rate of the neighbouring cells. Examiner respectfully disagrees with applicant as Wan teaches adjusting the scanning rate of the neighbouring cells as seen in paragraph 86 and further clarified in Figure 5, 530.

Applicant is reminded that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allowed. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUJOY K. KUNDU whose telephone number is (571)272-8586. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. K. K./  
Examiner, Art Unit 2863

/Tung S. Lau/  
Primary Examiner, Art Unit 2863  
April 8, 2009